

WHAT IS CLAIMED IS:

1. An α -ray measuring apparatus comprising:
an α -ray detector including a plurality of semiconductor detectors;
an adder for adding output signals from said respective semiconductor detectors; and
a peak analyzer for analyzing an energy distribution of α -rays based on the addition of the output signals of said semiconductor detectors.
2. An α -ray measuring apparatus comprising:
an α -ray detector including a plurality of semiconductor detectors arranged on a plane surface;
an adder for adding output signals from said respective semiconductor detectors to generate an addition output signal;
an anticoincidence counter for anticoincidentally counting the output signals from said respective semiconductor detectors; and
a peak analyzer for analyzing an energy distribution of α -rays based on an addition of the output signals of semiconductor detectors which are not anticoincidentally counted.
3. An α -ray measuring apparatus comprising:
an α -ray detector including a plurality of semiconductor detectors arranged one above another;
an adder for adding output signals from said respective semiconductor detectors to generate an addition output signal;

an anticoincidence counter for anticoincidentally counting the output signals of said respective semiconductor detectors; and

a peak analyzer for analyzing an energy distribution of α -rays based on an addition of the output signals of said respective semiconductor detectors which are not anticoincidentally counted.

4. An α -ray measuring apparatus comprising:

an α -ray detector including a plurality of semiconductor detectors arranged on plane surfaces placed one above another;

an adder associated with each plane surface for adding output signals from said respective semiconductor detectors on said associated plane surface to generate an addition output signal;

an anticoincidence counter for anticoincidentally counting the addition output signals of said respective sensors on said respective plane surfaces; and

a peak analyzer for analyzing an energy distribution of α -rays based on the addition output signals from said respective semiconductor detectors on said respective plane surfaces which are not anticoincidentally counted.

5. An α -ray measuring apparatus according to claim 1, wherein:

said anticoincidence counter anticoincidentally counts between an output signal of at least one of said

semiconductor detectors and output signals of the remainder of said semiconductor detectors.

6. An α -ray measuring apparatus according to claim 1, further comprising a data processor for specifying an energy range to be evaluated, and for displaying the result of analysis.

7. An α -ray measuring method comprising the steps of:

detecting α -rays using a plurality of semiconductor detectors;

adding output signals from said respective semiconductor detectors; and

analyzing an energy distribution of the α -rays based on an addition of the output signals from said semiconductor detectors.

8. An α -ray measuring method comprising the steps of:

detecting α -rays using a plurality of semiconductor detectors arranged on a plane surface;

adding output signals from said respective semiconductor detectors;

anticoincidentally counting the output signals from said respective semiconductor detectors; and

analyzing an energy distribution of the α -rays based on an addition of the output signals from said semiconductor detectors which are not anticoincidentally countered.

9. An α -ray measuring method comprising the

steps of:

detecting α -rays using a plurality of semiconductor detectors arranged one above another;

adding output signals from said respective semiconductor detectors;

anticoincidentally counting the output signals of said respective semiconductor detectors; and

analyzing an energy distribution of the α -rays based on an addition of the output signals from said semiconductor detectors which are not anticoincidentally countered.

10. An α -ray measuring method comprising the steps of:

detecting α -rays using a plurality of semiconductor detectors arranged on plane surfaces placed one above another;

adding output signals from said respective semiconductor detectors on each of said plane surfaces;

anticoincidentally counting the output signals from said respective semiconductor detectors on said respective plane surfaces; and

analyzing an energy distribution of the α -rays based on an addition of the output signals from said semiconductor detectors on each of said plane surface which are not anticoincidentally countered.